

1987

REFERENCE COPY

Census of  
Construction Industries

CC87-I-9

INDUSTRY SERIES

Heavy Construction  
Contractors,  
Not Elsewhere Classified

Industry 1629



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This report was prepared in the Construction Statistics Division. **Barry A. Rappaport**, Assistant Division Chief for Industry Surveys, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **A. William Visnansky**, Chief, Census Operations Branch, with primary staff assistance by **Juliana Van Berkum**, **Barbara J. Hadden**, **Edward R. Glover**, **Susan L. Hostetter**, **Shirley M. Baker**, and **Carolyn J. Stone**. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans and variance and estimation specifications.

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If you have any questions concerning the statistics in this report, call (301) 763-7546.

# **1987**

# **Census of Construction Industries**

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Issued January 1990



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## PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

*Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.*

*Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.*

*State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.*

*Trade associations study trends in their own and competing industries, and keep their members informed of market changes.*

*Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.*

## AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the—

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

## AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

## WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan



areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

One important change involves receipts of contractors and builders. Prior to 1987, the Census of Construction Industries collected receipts as the primary measure of construction activity. For 1987, the census collected the "value of construction work done" to better measure actual construction activity done during the year. Differences between the two concepts occur when work is done in one year and payment received either from the prior or in the succeeding year. In addition, receipts do not include work a contractor performs for its own account and use.

## HISTORICAL INFORMATION

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying intervals.

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in

other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

## AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Construction Reports* (building permits, housing starts, and value of new construction put in place), *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures*, *Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

## SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses*. Contact Customer Services for information on availability.

## CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1987 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property



into lots as defined in the 1987 Standard Industrial Classification (SIC) Manual.<sup>1</sup> This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

**Contract construction**—The SIC manual defines construction in three broad types of activity that follow:

1. **Building construction by general contractors or by operative builders**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors**—Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors**—These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

In addition to the industries classified in the SIC manual as Construction, this census also includes one industry

classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. These establishments are engaged in subdividing real property into lots and in developing it for sale on their own account.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1987. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

A revised edition of the SIC Manual was issued in 1987. Minor modifications were made to three industries in the construction sector: SIC 1611, Highway and Street Construction Contractors, Except Elevated Highways; SIC 1629, Heavy Construction Contractors, N.E.C; and SIC 1771, Concrete Work Special Trade Contractors. The extent of these modifications are explained in the specific texts for those industries. "Bridge tables" are also included showing selected data tabulated using both the previous classification system and the 1987 revision.

## ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1987. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

<sup>1</sup>Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.



If an establishment engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1987 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1987 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

## **SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES**

The companies included in the 1987 Census of Construction Industries were identified as part of an operation common to all 1987 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government.

### **Employer Companies**

**Developing the sampling frame for employer companies**—This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative records data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1987 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1987 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

**Selecting the employer sample**—The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with estimated total employment of 20 employees or more, and a probability sample of single-establishment companies with estimated employment of fewer than 20 employees.

Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 533,000 single-establishment employer companies initially classified as construction companies, 147,000 were included in the sample. All of the 13,000 establishments of multiestablishment companies were included in the sample. There was a net increase in the sample of 60,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan



area or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

#### Estimation procedures for 1987 and 1982 data—

Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1987 and 1982 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where:  $x'_c$  is the simple unbiased estimate of a characteristic for a publication cell.

$x_i$  is the reported value of a characteristic for an individual establishment in the publication cell.

$p_i$  is the selection probability of that firm.

$n_c$  is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

**Reliability of employer statistics—**Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the

sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

## Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.



## CENSUS REPORT FORMS

Information for the 1987 Census of Construction Industries was obtained from employer establishments primarily through the use of twenty-four questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179 and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and appropriate advisory groups. The Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

## DATA PROCESSING

The 1987 census report forms were mailed out in December 1987. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1988.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all

revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

## GEOGRAPHIC CLASSIFICATION

Information for the 1987 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical locations of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

## DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries, results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1987 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, land receipts are also subtracted from dollar value of business done.

## SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, DC, 20233.



To discuss a special tabulation before submitting specifications, call 301-763-7546.

**COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA**

Data contained in the reports of the 1987 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the Census of Construction.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

**ABBREVIATIONS AND SYMBOLS**

The following abbreviations and symbols are used in this publication:

- \* Sampling error exceeds 40 percent.
- \*\* Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
- Represents zero.
- † Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
- †† Represents dollar value of business done less costs for construction work subcontracted to others, and costs for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from dollar value of business done. (See Duplication in Value of Construction Work.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- (X) Not applicable.
- n.s.k. Not specified by kind.

# Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employment size	By size class of dollar value of business done	By type, class, ownership, kind of business, and location of construction <sup>1</sup>	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment.....	3					
End of year—total.....	1, 3	1	5	6		
End of year—buildings, machinery and equipment.....	3					
Depreciation charges during year—buildings, machinery and equipment.....	3					
Capital expenditures:						
Total capital expenditures.....	1, 3	1	5	6		
New buildings—machinery and equipment.....	3					
Used buildings—machinery and equipment.....	3					
Communication services, costs for.....	2					
Employees:						
All employees—average number.....	1, 2	1	5	6		8
Construction workers—average number.....	1, 2, 9	1, 9				
Other employees—average number.....	2					
Employer costs for fringe benefits—legally required and voluntary expenditures.....	2					
Establishments—number in business during year.....	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total.....	1, 2, 9	1, 9	5	6		
Quarterly.....	2, 9	9				
Inventories.....	4					
Materials, components, supplies, and fuels—costs for.....	1, 2	1	5	6		
Payroll:						
First quarter, all employees.....	2					
Annual:						
All employees.....	1, 2	1	5	6		8
Construction workers.....	1, 2	1				
Other employees.....	2					
Power, fuels, and lubricants—costs for.....	2					
Proprietors and working partners.....	2					
Ratios, State.....	13	13				
Value and receipts:						
Dollar value of business done, total.....	2		5	6	11	
Value of construction work, total.....	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others.....	2					
Other business receipts and land receipts <sup>2</sup> .....	2					
Net value of construction work.....	1, 2	1	5	6		8
Value added.....	1, 2	1	5	6		8
Rental costs:						
Total.....	1, 2	1	5	6		
For machinery and equipment.....	2					
For buildings.....	2					
Repairs to buildings and other structures.....	2					
Repairs to machinery and equipment.....	2					
Selected industry ratios.....	12					
Subcontract work to others, costs for.....	1, 2	1	5	6		8

Note: Data for 1982 and earlier years are also available in some of these tables.

<sup>1</sup>Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work. Ownership—private or government owned.

<sup>2</sup>Land receipts are shown separately for SIC's 1531 and 6552 only.



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## Heavy Construction Contractors, Not Elsewhere Classified

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# SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in heavy construction projects, not elsewhere classified, such as construction of chemical complexes, dams and reservoirs, harbor and port facilities, missile facilities, oil refineries, subways, water and sewer treatment plants, light and power plants, industrial ovens and incinerators, and flood control projects. For additional examples, refer to the 1987 Standard Industrial Classification (SIC) Manual published by the Office of Management and Budget, Executive Office of the President.

During 1987, the establishments with paid employees classified in this industry accounted for \$27.3 billion in total dollar value of business. Of this amount, \$25.6 billion were for the value of construction work. These establishments paid out \$6.9 billion for materials, components, and supplies, and \$4.4 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for this industry were \$636 million. Value added for 1987 was \$15.3 billion.

There were 14,532 establishments with total employment averaging 297,618 during the year. Total payroll for 1987 was \$7.7 billion. Total hours worked by construction workers during the year were 421 million hours.

Larger establishments with 20 employees or more, while representing only 13 percent of the total number of employer establishments in this industry accounted for 83 percent of all business done.

The content of this industry has been changed in the 1987 revision of the SIC Manual. Contractors primarily engaged in the construction of athletic fields, bridle paths,

golf courses, tennis courts, trails, and trailer camps were previously classified in Industry 1611, Highway and Street Construction Contractors, Except Elevated Highways, but are now included in this industry. Selected data were tabulated using both the previous classification system and the 1987 revision and are shown in the table below.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have excluded the value of work in progress during the calendar year. Receipts may have also excluded work done by builders engaged in construction for sale on their own account or for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## 1987 Data Showing the Derivation of the New Classification Based on the Old Classification

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry	Number of establishments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Capital expenditures other than land
New Industry 1629, Heavy Construction, N.E.C. . . . .	14 532	297 618	7 661 992	25 632 969	21 209 274	15 300 639	672 353
Old Industry 1611, Highway and Street Construction (pt.).	456	5 459	116 248	535 782	429 253	276 397	17 944
Old Industry 1629, Heavy Construction, N.E.C. . . . .	14 075	292 159	7 545 743	25 097 187	20 780 021	15 024 242	654 408



Figure 1. **Value of Construction Work by Type of Construction**  
(Percent)

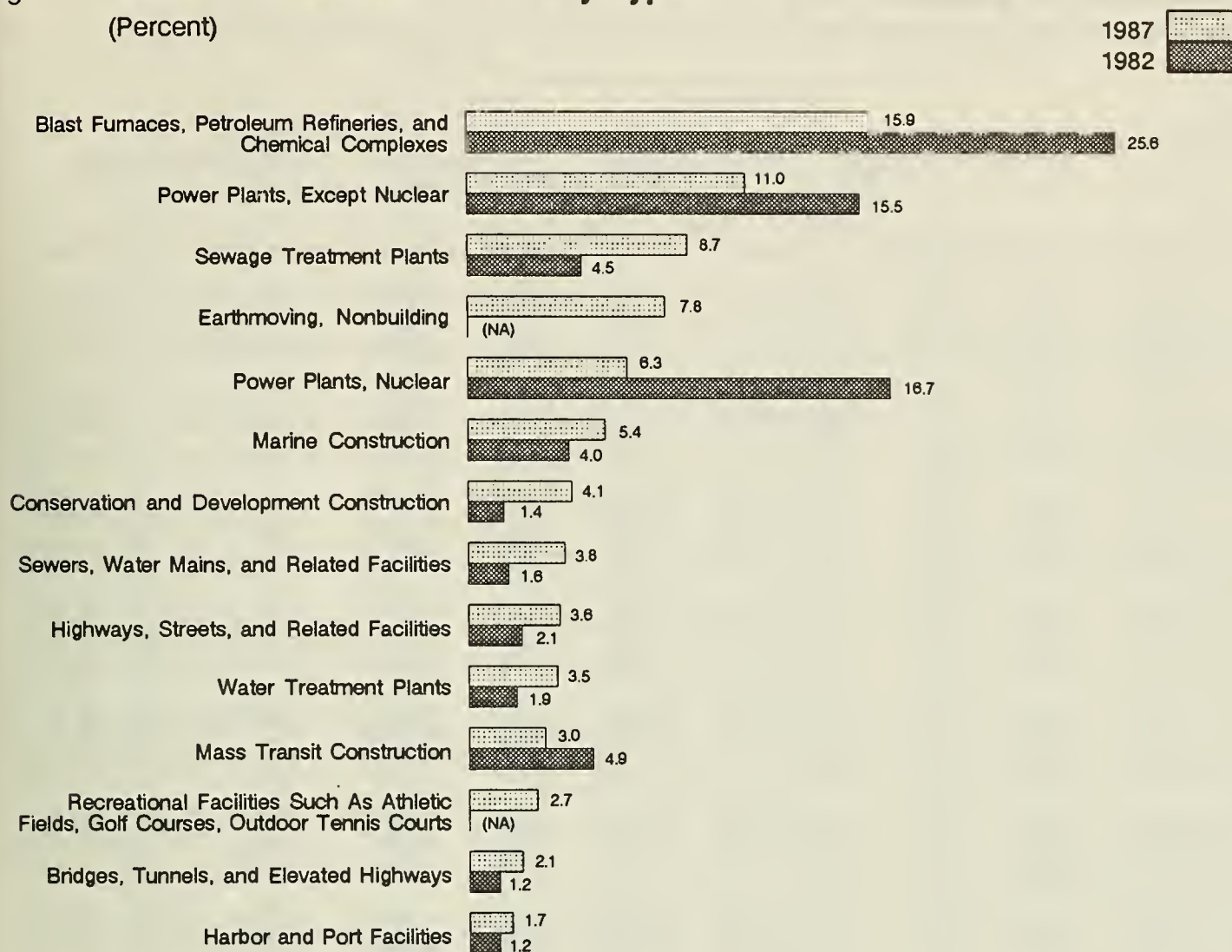
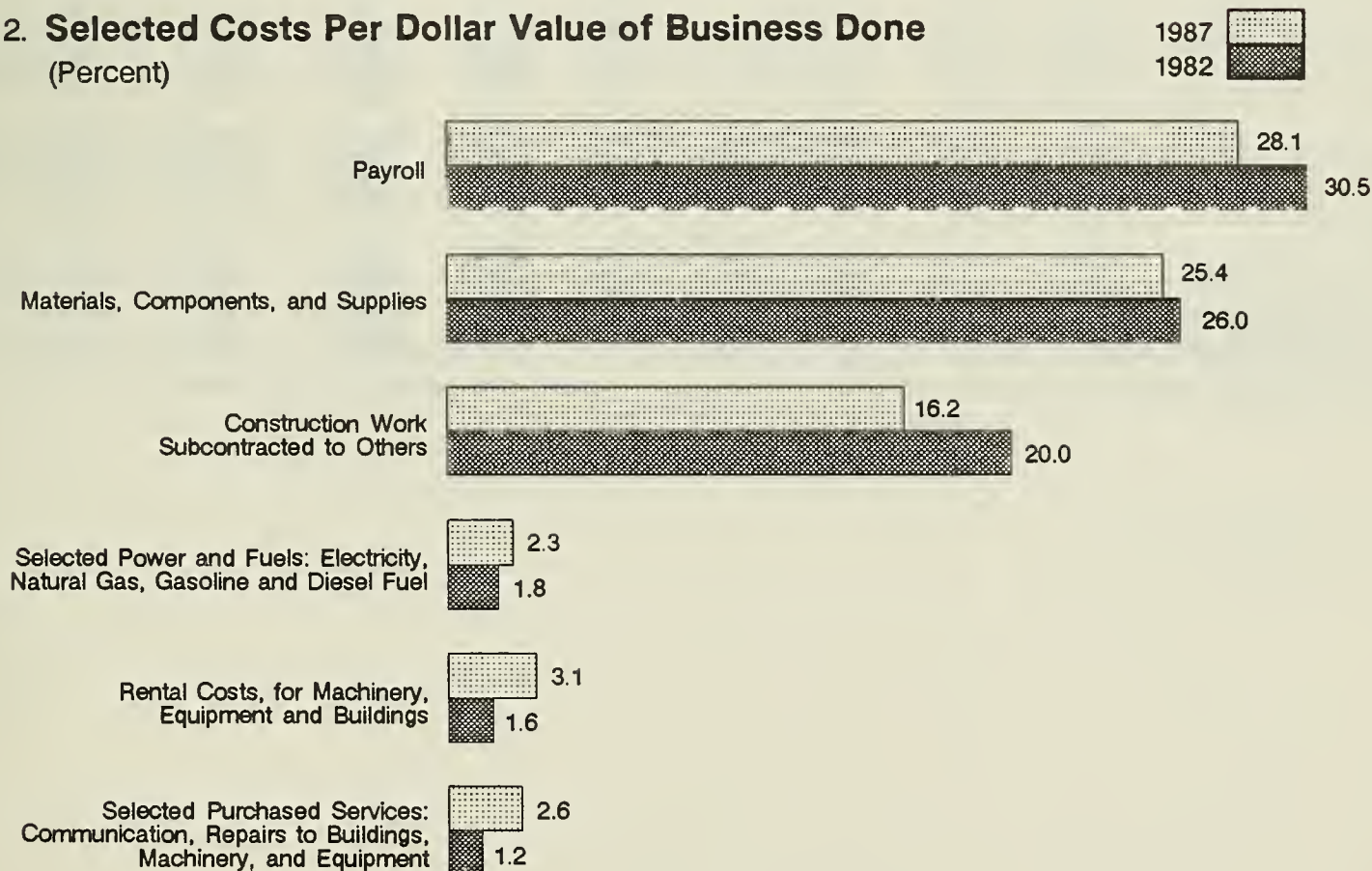


Figure 2. **Selected Costs Per Dollar Value of Business Done**  
(Percent)



For meaning of abbreviations and symbols, see introductory text.

**Table 1. General Statistics for Establishments With Payroll by State: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1987							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States .....	14 532	297 618	238 204	7 661 992	5 726 472	420 660	25 632 969	21 209 274
Alabama .....	280	8 433	6 867	193 584	153 615	12 928	727 367	471 862
Alaska .....	86	1 142	934	42 750	27 675	1 432	109 420	96 679
Arizona .....	187	3 379	2 694	75 723	57 602	4 664	240 070	196 421
Arkansas .....	196	1 742	1 459	31 952	24 854	2 474	127 253	115 840
California .....	1 146	34 276	24 604	1 043 796	718 349	42 878	3 727 902	3 222 676
Colorado .....	270	4 968	3 917	117 403	89 109	6 796	463 802	383 593
Connecticut .....	221	5 280	4 588	150 855	126 683	7 651	437 511	401 037
Delaware .....	26	995	874	36 037	32 505	1 810	76 811	73 282
District of Columbia .....	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida .....	923	12 221	10 011	247 488	183 955	17 857	1 045 318	871 981
Georgia .....	477	6 074	5 003	121 774	91 939	8 679	527 124	436 571
Hawaii .....	46	1 009	766	31 879	23 306	1 307	119 633	89 856
Idaho .....	70	716	505	17 946	13 292	929	101 159	(D)
Illinois .....	413	5 954	4 821	152 681	113 484	8 472	826 500	688 879
Indiana .....	316	3 872	3 184	98 290	78 727	5 452	418 590	335 108
Iowa .....	292	1 509	1 148	26 463	19 507	2 051	115 815	93 803
Kansas .....	195	2 052	1 708	42 629	32 075	3 367	156 988	138 238
Kentucky .....	217	2 201	1 822	37 935	29 695	2 949	162 468	139 475
Louisiana .....	333	17 028	15 217	369 726	317 097	27 949	1 009 234	901 269
Maine .....	133	4 236	3 699	126 130	109 034	8 119	354 726	312 091
Maryland .....	174	7 627	4 586	214 428	124 156	7 273	616 650	514 897
Massachusetts .....	300	6 592	4 566	205 754	133 576	8 469	723 218	561 646
Michigan .....	392	5 554	4 503	141 419	116 161	7 840	539 054	462 669
Minnesota .....	281	2 451	2 114	64 151	54 458	4 088	249 555	205 568
Mississippi .....	178	1 747	1 544	30 612	26 188	2 705	96 986	85 979
Missouri .....	309	2 642	2 108	55 534	41 043	3 114	239 753	187 576
Montana .....	171	1 005	816	26 238	16 755	1 338	143 278	123 540
Nebraska .....	152	936	719	17 944	11 911	1 120	89 505	78 073
Nevada .....	51	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire .....	128	1 364	1 105	29 837	22 493	2 001	123 510	108 781
New Jersey .....	385	10 895	8 994	365 128	264 254	16 532	952 518	856 024
New Mexico .....	102	1 330	1 172	27 452	24 522	2 081	91 129	79 812
New York .....	559	8 460	6 664	244 835	177 626	11 551	1 142 148	882 385
North Carolina .....	521	4 141	3 325	71 154	51 809	6 374	290 159	248 638
North Dakota .....	83	633	531	14 141	11 567	703	53 911	38 408
Ohio .....	408	8 340	6 420	228 433	165 747	10 366	996 536	704 255
Oklahoma .....	330	3 788	3 102	61 823	48 081	5 125	203 689	172 352
Oregon .....	182	971	721	22 667	16 661	1 039	136 822	105 522
Pennsylvania .....	454	17 134	13 548	516 462	388 531	24 318	1 288 528	1 071 080
Rhode Island .....	38	376	310	9 492	7 420	464	39 435	32 193
South Carolina .....	260	21 130	17 928	549 720	395 848	30 582	1 596 464	1 256 453
South Dakota .....	38	137	125	1 801	1 618	213	8 293	(D)
Tennessee .....	269	3 248	2 751	66 887	51 646	5 124	321 124	255 887
Texas .....	1 457	45 713	38 209	1 107 271	892 672	69 658	2 753 256	2 310 182
Utah .....	96	1 227	997	27 970	21 834	1 586	124 332	109 621
Vermont .....	67	485	394	8 373	6 234	676	31 185	27 779
Virginia .....	409	5 961	4 872	118 847	89 234	7 902	405 087	333 382
Washington .....	402	4 984	4 006	158 091	110 008	7 323	672 952	572 612
West Virginia .....	136	2 355	2 038	55 581	38 797	3 205	146 887	134 683
Wisconsin .....	233	1 607	1 296	35 352	26 516	2 027	173 335	134 361
Wyoming .....	112	915	747	20 607	15 736	1 295	77 565	66 655

\*In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.



1987—Con.						1982			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
15 300 639	7 585 796	4 423 695	833 356	672 353	5 833 429	415 199	33 657 455	18 952 918	(W)	(W)	2	U.S.
365 702	(D)	255 505	8 984	16 997	128 505	5 815	499 235	218 764	3	2	27	AL
68 186	35 279	12 741	3 932	1 992	34 821	2 030	172 292	140 167	10	7	11	AK
141 878	70 464	43 648	7 683	5 467	49 233	2 151	224 162	230 991	3	4	21	AZ
68 106	49 830	11 413	4 058	7 602	50 789	2 454	130 079	91 828	10	9	14	AR
2 142 609	1 155 923	505 226	148 391	98 293	591 395	60 637	6 847 226	3 999 987	1	1	3	CA
260 700	134 844	80 209	19 648	19 489	159 754	5 762	857 485	392 561	3	2	5	CO
343 760	59 920	36 473	6 952	13 002	66 024	(D)	(D)	(D)	2	2	11	CT
52 633	22 109	3 528	2 051	803	9 267	1 367	(D)	(D)	3	3	21	DE
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	DC
537 580	364 453	173 336	47 299	37 887	261 889	8 549	652 163	385 794	3	2	8	FL
267 658	175 791	90 553	15 994	15 531	124 631	4 420	290 185	150 808	3	3	14	GA
64 891	(D)	29 777	4 013	5 905	38 311	321	26 894	14 660	3	2	4	HI
50 969	28 784	(D)	2 432	915	14 497	(D)	(D)	(D)	9	(D)	33	ID
483 592	226 175	137 621	29 172	30 545	241 642	8 812	979 395	506 554	3	2	5	IL
212 266	128 025	83 482	13 888	14 028	86 092	5 342	347 947	260 650	4	3	13	IN
64 620	35 999	22 012	2 912	3 307	65 357	847	67 408	32 301	10	9	26	IA
90 111	50 380	18 749	6 769	8 539	78 873	3 128	225 788	93 010	6	6	10	KS
91 124	52 105	22 992	6 811	10 856	70 322	1 646	110 847	63 163	13	11	20	KY
663 379	256 046	107 964	33 180	15 210	470 271	18 755	1 409 072	917 177	1	1	5	LA
242 682	72 159	42 634	18 294	16 537	95 562	1 218	85 462	42 132	3	3	20	ME
424 115	99 024	101 753	23 664	14 384	122 556	9 165	684 393	499 566	2	2	14	MD
399 637	203 023	161 572	25 400	16 856	134 802	13 963	612 474	338 142	2	2	11	MA
331 087	140 580	76 385	13 973	26 426	216 837	13 773	1 233 754	758 119	3	3	5	MI
113 022	95 746	43 987	7 715	12 425	97 306	4 840	418 568	(D)	5	5	21	MN
56 003	33 918	11 007	3 223	3 110	24 957	8 360	695 478	307 878	9	7	17	MS
131 140	60 463	52 177	6 966	7 196	106 691	2 918	316 569	140 471	5	5	15	MO
83 946	41 229	19 737	3 899	2 404	36 753	1 404	80 137	52 958	6	3	12	MT
53 864	27 763	11 432	4 199	2 685	33 880	340	29 404	15 683	9	7	11	NE
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	NV
73 299	39 218	14 729	6 134	6 657	39 201	5 974	240 536	184 349	7	6	11	NH
755 047	(D)	96 494	19 292	22 364	141 844	7 636	631 407	379 844	1	1	7	NJ
46 804	33 428	11 317	6 588	2 969	23 701	1 186	60 908	40 549	6	6	24	NM
604 195	292 660	259 763	34 887	26 115	184 339	7 158	706 181	363 894	3	2	10	NY
171 677	82 918	41 521	11 603	12 958	136 098	2 429	255 408	161 627	6	6	16	NC
27 152	(D)	15 503	865	397	4 608	178	16 471	6 937	15	14	3	ND
501 273	270 389	292 281	19 929	18 728	173 549	17 346	876 804	529 843	2	2	7	OH
105 203	86 132	31 337	8 625	5 819	61 251	4 841	297 028	180 692	5	6	17	OK
67 295	41 057	31 300	5 786	3 841	42 756	1 064	83 950	51 067	8	7	29	OR
790 001	307 099	217 448	26 873	20 671	156 860	17 215	1 330 838	855 671	1	1	13	PA
22 710	9 833	7 241	1 125	703	5 294	548	42 763	27 297	12	10	12	RI
1 213 412	(D)	340 010	31 884	15 367	63 356	(D)	(D)	(D)	1	1	12	SC
(D)	*2 548	(D)	353	287	3 649	(S)	(S)	(S)	25	(D)	35	SD
156 523	103 790	65 236	10 218	11 103	91 608	2 579	213 106	104 936	4	4	14	TN
1 707 817	931 374	443 073	110 534	47 513	743 473	80 998	5 662 114	3 613 146	1	1	3	TX
79 102	(D)	14 710	4 882	7 047	54 075	1 991	130 877	90 692	8	5	12	UT
21 519	8 305	3 405	1 062	1 728	12 774	(D)	(D)	(D)	11	12	24	VT
221 412	115 877	71 704	17 016	20 394	149 536	3 964	334 734	131 946	8	8	28	VA
367 384	213 915	100 339	21 099	21 451	151 755	7 857	972 283	692 973	6	5	9	WA
106 930	30 153	12 203	4 719	5 974	36 424	3 141	182 720	137 591	5	4	26	WV
92 049	44 563	38 973	3 940	8 259	90 490	1 219	116 325	77 793	8	6	16	WI
40 882	27 001	10 910	3 483	1 456	42 814	651	42 683	30 361	8	8	35	WY

**Table 2. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	14 532	7 662	8 342	8 110	1	2	2	3
Proprietors and working partners .....	3 585	1 914	4 451	4 775	4	5	5	5
All employees** .....	297 618	415 199	412 719	286 211	(W)	(W)	(W)	1
Construction workers:								
March .....	222 536	343 523	293 876	216 599	(W)	(W)	(W)	1
May .....	242 847	337 572	324 564	230 788	1	(W)	(W)	1
August .....	244 807	314 569	334 002	245 745	1	(W)	(W)	1
November .....	242 652	319 609	320 642	236 802	(W)	(W)	(W)	1
Average .....	238 204	329 475	318 375	233 449	(W)	(W)	(W)	1
Other employees:								
March .....	59 511	85 453	92 739	50 499	1	(W)	(W)	1
May .....	59 656	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August .....	59 240	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November .....	59 250	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average .....	59 414	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	94 125	148 261	(NA)	(NA)	1	(W)	(NA)	(NA)
April to June .....	107 526	148 188	(NA)	(NA)	1	(W)	(NA)	(NA)
July to September .....	110 174	153 780	(NA)	(NA)	1	(W)	(NA)	(NA)
October to December .....	108 833	153 732	(NA)	(NA)	1	(W)	(NA)	(NA)
Total hours worked .....	420 660	603 963	(NA)	(NA)	1	(W)	(NA)	(NA)
Payroll, all employees .....	7 661 992	11 062 660	7 298 267	3 665 520	(W)	(W)	(W)	1
Payroll, construction workers .....	5 726 472	8 649 399	5 274 120	2 875 686	(W)	(W)	(W)	1
Payroll, other employees .....	1 935 519	2 413 261	2 024 147	789 834	(W)	(W)	(W)	1
First quarter payroll, all employees .....	1 719 499	2 423 588	1 596 110	(NA)	(W)	(W)	(W)	(NA)
Employer costs for fringe benefits, all employees .....	1 834 442	1 903 384	1 354 246	(NA)	(W)	(W)	(W)	(NA)
Legally required expenditures .....	1 177 878	1 352 977	702 449	(NA)	(W)	(W)	(W)	(NA)
Voluntary expenditures .....	656 563	550 406	651 797	(NA)	(W)	(W)	(W)	(NA)
Dollar value of business done .....	27 310 131	36 310 245	23 282 543	11 483 106	(W)	(W)	(W)	1
Value of construction work <sup>1</sup> .....	25 632 969	33 657 455	21 624 035	11 047 756	(W)	(W)	(W)	1
Value of construction work subcontracted in from others .....	3 294 752	1 949 539	1 217 455	882 645	2	1	1	2
Land receipts <sup>2</sup> .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts .....	1 677 162	2 652 790	1 658 508	435 350	(W)	(W)	(W)	1
Net value of construction work† .....	21 209 274	26 391 852	17 527 251	8 962 585	(W)	(W)	(W)	1
Value added†† .....	15 300 639	18 952 918	12 446 662	5 522 251	(W)	(W)	(W)	1
Selected costs .....	12 009 491	17 357 327	10 835 881	5 960 855	(W)	(W)	(W)	1
Materials, components, and supplies <sup>3</sup> .....	6 949 590	9 452 406	6 353 738	3 875 684	(W)	(W)	(W)	1
Construction work subcontracted to others .....	4 423 695	7 265 602	4 096 784	2 085 171	1	(W)	(W)	1
Selected power, fuels, and lubricants .....	636 206	639 318	385 359	(NA)	1	(W)	(W)	(NA)
Electricity .....	65 774	105 820	42 650	(NA)	1	(W)	(W)	(NA)
Natural gas .....	5 350	16 962	16 202	(NA)	2	(W)	(W)	(NA)
Gasoline and diesel fuel .....	512 577	465 276	276 596	(NA)	1	(W)	(W)	(NA)
On highway use .....	213 346	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use .....	299 231	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	52 503	51 259	49 958	(NA)	1	1	1	(NA)
Rental cost for machinery, equipment, and buildings .....	833 356	569 707	498 877	(NA)	1	(W)	(W)	(NA)
For machinery and equipment .....	728 531	473 109	436 842	250 351	1	1	(W)	2
For buildings .....	104 824	96 597	62 035	(NA)	1	(W)	1	(NA)
Selected purchased services .....	705 775	438 848	409 777	(NA)	1	(W)	1	(NA)
Communication services .....	107 507	115 854	78 865	(NA)	1	(W)	1	(NA)
Repairs to buildings and other structures .....	22 398	13 497	15 852	(NA)	3	2	1	(NA)
Repairs to machinery and equipment .....	575 869	309 496	315 061	(NA)	1	1	1	(NA)
Ownership of construction projects:								
Value of construction work <sup>1</sup> .....	25 632 969	33 657 455	21 624 035	11 047 756	(W)	(W)	(W)	1
Government owned .....	9 066 320	8 105 801	5 562 202	3 649 390	1	(W)	(W)	1
Federal .....	2 939 784	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
State and local .....	6 126 535	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Privately owned .....	16 566 649	25 551 654	16 061 833	7 398 366	1	(W)	(W)	1

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders, and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.



**Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets .....	5 823 246	5 282 509	1	(W)
Capital expenditures, other than land .....	672 353	448 890	2	1
New .....	463 784	354 051	2	(W)
Used .....	208 568	94 839	4	3
Retirements and disposition of depreciable assets .....	662 169	278 713	2	1
End-of-year gross book value of depreciable assets .....	5 833 429	5 452 687	1	(W)
Depreciation charges during year .....	627 814	549 801	2	(W)
<b>Buildings and other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets .....	602 898	764 350	2	1
Capital expenditures, other than land .....	48 136	97 185	5	1
New buildings and other structures .....	30 253	87 030	3	1
Used buildings and other structures .....	17 883	10 154	12	3
Retirements and disposition of depreciable assets .....	70 954	32 092	2	1
End-of-year gross book value of depreciable assets .....	580 080	829 443	2	1
Depreciation charges during year .....	38 156	63 507	2	1
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets .....	5 220 347	4 518 159	1	(W)
Capital expenditures, other than land .....	624 216	351 705	2	1
New machinery and equipment, including automobiles and trucks .....	433 531	267 020	2	1
New automobiles and trucks, intended primarily for highway use .....	114 588	48 338	4	1
Used machinery and equipment, including automobiles and trucks .....	190 684	84 685	3	3
Retirements and disposition of depreciable assets .....	591 214	246 621	2	1
End-of-year gross book value of depreciable assets .....	5 253 349	4 623 243	1	(W)
Depreciation charges during year .....	589 657	486 293	2	1

**Table 4. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	14 532	1
Value of construction work .....	25 632 969	(W)
<b>Establishments with inventories:</b>		
Number .....	3 992	3
Value of construction work .....	7 373 975	1
<b>Inventories<sup>1</sup>:</b>		
End of 1987, materials and supplies .....	171 179	4
End of 1986, materials and supplies .....	182 822	3
<b>Establishments with no inventories:</b>		
Number .....	8 229	3
Value of construction work .....	13 140 725	1
<b>Establishments not reporting:</b>		
Number .....	2 311	5
Value of construction work .....	5 118 269	1

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.

**Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments -----	14 532	8 051	2 744	1 799	1 182	430	193	70	30	32
All employees** -----	297 618	15 812	18 003	24 090	35 630	29 097	29 737	24 317	21 963	98 968
Payroll, all employees -----	7 661 992	243 015	332 624	494 162	844 898	733 602	840 396	730 799	571 782	2 870 712
Construction worker hours (thousands) -----	420 660	19 919	24 454	31 329	52 118	42 975	45 868	39 411	33 270	131 312
Dollar value of business done -----	27 310 131	1 296 661	1 384 525	2 017 383	3 649 552	3 063 428	3 189 721	3 143 070	1 957 506	7 608 283
Value of construction work <sup>1</sup> -----	25 632 969	1 267 653	1 348 849	1 968 226	3 565 869	3 014 951	3 054 854	3 066 528	1 868 315	6 477 723
Net value of construction work† -----	21 209 274	1 146 067	1 192 051	1 702 642	2 958 232	2 442 137	2 478 635	2 472 463	1 463 941	5 353 105
Value added†† -----	15 300 639	806 423	855 355	1 187 356	1 963 162	1 533 524	1 748 103	1 743 434	981 604	4 481 676
Cost of materials, components, supplies, and fuels -----	7 585 796	368 651	372 372	564 442	1 078 753	957 090	865 399	805 571	571 528	2 001 989
Cost of construction work subcontracted to others -----	4 423 695	121 585	156 798	265 584	607 637	572 814	576 219	594 065	404 374	1 124 618
Rental cost for machinery, equipment, and buildings -----	833 356	43 004	58 439	83 218	141 251	121 260	133 820	79 032	39 310	134 020
Capital expenditures, other than land -----	672 353	68 325	80 465	89 936	131 245	73 587	85 079	88 279	30 313	25 122
End-of-year gross book value of depreciable assets -----	5 833 429	629 514	641 107	709 375	1 085 045	592 800	740 681	752 303	187 884	494 719
<b>1982</b>										
All employees** -----	415 199	(S)	6 963	11 654	22 313	21 649	33 882	32 002	37 061	241 971
Total construction receipts <sup>1</sup> -----	33 657 455	(S)	450 245	798 316	1 939 637	1 962 810	3 173 413	3 051 301	3 436 280	18 370 989
Value added†† -----	18 952 918	(S)	247 271	439 167	1 042 876	937 539	1 478 493	1 812 024	1 814 467	10 910 769
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** -----	(W)	3	4	3	2	1	(W)	(W)	(W)	(W)
Net value of construction work† -----	(W)	4	4	3	2	(W)	(W)	(W)	(W)	(W)
Capital expenditures, other than land -----	2	8	7	7	6	3	(W)	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

**Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1987											
Number of establishments -----	14 532	(S)	(S)	(S)	3 714	2 458	1 895	1 408	669	364	374
All employees** -----	297 618	(S)	(S)	(S)	10 708	14 219	18 568	27 270	25 162	26 390	170 092
Payroll, all employees -----	7 661 992	(S)	(S)	(S)	144 398	220 838	353 048	579 800	612 594	648 651	5 056 749
Construction worker hours (thousands) -----	420 660	(S)	(S)	(S)	12 287	19 567	25 239	38 380	37 138	40 128	242 457
Dollar value of business done -----	27 310 131	(S)	(S)	(S)	594 205	852 112	1 341 038	2 208 845	2 349 986	2 569 910	17 204 841
Value of construction work <sup>1</sup> -----	25 632 969	(S)	(S)	(S)	581 313	829 852	1 309 915	2 141 040	2 293 841	2 530 890	15 760 452
Net value of construction work† -----	21 209 274	(S)	(S)	(S)	547 991	763 053	1 179 076	1 893 668	1 932 947	2 092 200	12 623 919
Value added†† -----	15 300 639	(S)	(S)	(S)	395 430	549 942	849 189	1 335 111	1 307 642	1 374 428	9 366 037
Cost of materials, components, supplies, and fuels -----	7 585 796	(S)	(S)	(S)	165 453	235 371	361 011	626 362	681 451	756 791	4 702 271
Cost of construction work subcontracted to others -----	4 423 695	(S)	(S)	(S)	33 322	66 798	130 838	247 371	360 893	438 690	3 136 533
Rental cost for machinery, equipment, and buildings -----	833 356	(S)	(S)	(S)	15 118	36 221	53 115	100 829	82 153	115 439	425 966
Capital expenditures, other than land -----	672 353	(S)	(S)	(S)	34 189	62 532	68 438	115 112	76 236	74 966	234 182
End-of-year gross book value of depreciable assets -----	5 833 429	(S)	(S)	(S)	365 046	472 891	595 396	763 828	738 448	536 266	2 250 972
1982											
All employees** -----	415 199	(S)	856	2 041	5 745	5 944	8 156	17 162	18 413	22 343	333 554
Total construction receipts <sup>1</sup> -----	33 657 455	(S)	20 616	78 765	256 718	305 021	484 417	1 057 803	1 370 080	1 880 323	28 193 621
Value added†† -----	18 952 918	(S)	12 027	46 735	153 556	179 364	290 645	594 824	751 153	947 853	15 970 948
1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	(W)	(S)	(S)	(S)	4	4	4	2	2	(W)	(W)
Net value of construction work† -----	(W)	(S)	(S)	(S)	4	4	4	2	2	1	(W)
Capital expenditures, other than land -----	2	(S)	(S)	(S)	10	10	7	7	8	2	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.



**Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair				
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	25 632 969	16 656 969	3 826 277	4 219 372	(W)	(W)	1	1
<b>Building construction</b> .....	1 804 110	1 365 815	265 150	173 144	1	1	2	3
Office buildings .....	358 922	252 753	73 512	32 656	1	1	1	5
Other commercial buildings such as stores, restaurants, and automobile service stations .....	300 581	231 925	40 222	28 432	3	3	6	5
Industrial buildings and warehouses .....	502 589	383 756	54 921	63 911	1	1	5	4
Other buildings .....	642 018	497 381	96 495	48 145	3	4	13	7
<b>Nonbuilding construction</b> .....	22 898 509	15 291 154	3 561 127	4 046 228	(W)	(W)	1	1
Highways, streets, and related facilities .....	923 313	678 255	168 761	76 296	1	1	3	4
Recreational facilities such as athletic fields, golf courses, and outdoor tennis courts .....	690 860	542 486	79 715	68 658	5	5	9	10
Bridges, tunnels, and elevated highways .....	532 104	350 212	151 149	30 741	1	2	1	4
Dam and reservoir construction .....	721 365	634 989	53 960	32 414	2	2	4	11
Marine construction .....	1 379 611	840 915	193 775	344 920	1	2	3	2
Harbor and port facilities .....	431 507	270 251	86 128	75 127	3	5	4	3
Conservation and development construction .....	1 062 716	780 319	150 236	132 160	3	3	6	6
Power and communication transmission lines, towers, and related facilities .....	274 727	188 258	23 741	62 728	3	4	2	4
Sewers, water mains, and related facilities .....	980 373	757 877	127 230	95 265	2	2	5	5
Sewers, sewer lines, and related facilities .....	571 449	436 327	84 486	50 635	2	3	5	7
Water mains and related facilities .....	408 924	321 550	42 744	44 629	2	2	7	6
Pipeline, other than sewer or water lines .....	249 086	182 001	26 579	40 505	2	3	4	6
Mass transit construction .....	780 781	319 557	264 065	197 158	2	3	2	4
Subways .....	262 313	104 780	(D)	(D)	(W)	1	(D)	(D)
Railroads .....	518 467	214 777	(D)	(D)	3	4	(D)	(D)
Blast furnaces, petroleum refineries, and chemical complexes .....	4 081 447	2 118 200	720 162	1 243 084	(W)	1	(W)	(W)
Power plants .....	4 454 151	2 823 683	483 500	1 146 967	(W)	(W)	1	(W)
Power plants, nuclear .....	1 624 007	871 015	173 453	579 538	(W)	(W)	(W)	(W)
Power plants, except nuclear .....	2 830 144	1 952 667	310 047	567 428	(W)	(W)	1	(W)
Sewage treatment and water treatment plants .....	3 138 903	2 344 836	672 232	121 834	1	1	2	5
Sewage treatment plants .....	2 230 966	1 659 269	498 791	72 905	1	1	2	6
Water treatment plants .....	907 937	685 566	173 441	48 929	1	1	6	7
Oilfields .....	296 365	190 953	30 174	75 237	3	3	4	6
Earthmoving, nonbuilding .....	1 993 541	1 611 812	200 900	180 829	3	3	7	6
Other nonbuilding construction .....	907 659	656 550	128 820	122 305	5	5	9	8
<b>Construction work, n.s.k.</b> .....	930 349	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	33 657 455	29 653 557	(NA)	4 003 897	(W)	(W)	(NA)	(W)
<b>Building construction</b> .....	2 438 968	2 233 666	(NA)	205 301	(W)	(W)	(NA)	1
Office buildings .....	167 195	161 071	(NA)	6 124	(W)	(W)	(NA)	3
Industrial buildings and warehouses .....	1 765 154	1 613 542	(NA)	151 612	(W)	(W)	(NA)	(W)
Hospitals and institutional buildings .....	133 162	127 126	(NA)	6 036	(W)	(W)	(NA)	(W)
Other buildings .....	373 457	331 927	(NA)	41 529	1	1	(NA)	1
<b>Nonbuilding construction</b> .....	29 922 433	26 252 823	(NA)	3 669 610	(W)	(W)	(NA)	(W)
Highways, streets, and related facilities .....	709 021	580 516	(NA)	128 505	(W)	1	(NA)	1
Bridges, tunnels, and elevated highways .....	414 175	319 433	(NA)	94 742	(W)	(W)	(NA)	(W)
Dam and reservoir construction .....	535 143	490 761	(NA)	44 382	1	1	(NA)	4
Marine construction .....	1 331 466	945 033	(NA)	386 432	1	1	(NA)	1
Harbor and port facilities .....	406 305	302 569	(NA)	103 736	2	1	(NA)	4
Conservation and development construction .....	465 380	401 893	(NA)	63 486	3	2	(NA)	5
Power and communication transmission lines, towers, and related facilities .....	159 663	145 307	(NA)	14 355	1	1	(NA)	2
Sewers, water mains, and related facilities .....	541 632	503 163	(NA)	38 468	1	1	(NA)	7
Sewers, sewer lines, and related facilities .....	367 376	347 869	(NA)	19 506	1	1	(NA)	4
Water mains and related facilities .....	174 255	155 293	(NA)	18 961	2	1	(NA)	13
Pipeline, other than sewer or water lines .....	337 907	310 055	(NA)	27 851	(W)	(W)	(NA)	2
Mass transit construction .....	1 642 480	1 333 113	(NA)	309 366	(W)	(W)	(NA)	1
Subways .....	1 051 937	991 222	(NA)	60 715	(W)	(W)	(NA)	(W)
Railroads .....	590 542	341 891	(NA)	248 650	1	1	(NA)	2
Blast furnaces, petroleum refineries, and chemical complexes .....	8 619 377	7 365 680	(NA)	1 253 696	(W)	(W)	(NA)	(W)
Power plants .....	10 851 818	10 121 334	(NA)	730 484	(W)	(W)	(NA)	(W)
Power plants, nuclear .....	5 621 458	5 430 045	(NA)	191 412	(W)	(W)	(NA)	(W)
Power plants, except nuclear .....	5 230 360	4 691 288	(NA)	539 071	(W)	(W)	(NA)	(W)
Sewage treatment and water treatment plants .....	2 142 784	2 019 267	(NA)	123 516	1	1	(NA)	2
Sewage treatment plants .....	1 501 290	1 428 649	(NA)	72 641	1	1	(NA)	3
Water treatment plants .....	641 493	590 618	(NA)	50 875	1	1	(NA)	3
Oilfields .....	839 291	674 838	(NA)	164 452	1	1	(NA)	3
Other nonbuilding construction .....	925 991	739 861	(NA)	186 139	1	1	(NA)	7
<b>Construction work, n.s.k.</b> .....	1 296 053	1 167 067	(NA)	128 986	1	1	(NA)	1

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were collected separately for SIC 1521, 1522, 1531, 1541, and 1542. For all other industries, data are included with "New construction."



**Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1987**

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments .....	14 532	297 618	7 661 992	25 632 969	15 845 401	21 209 274	15 300 639	4 423 695	(W)	(W)	1
Establishments not specializing by type .....	1 916	76 611	2 128 777	7 528 880	(NA)	5 952 319	4 334 053	1 576 561	1	1	1
Establishments specializing 51 percent or more .....	12 615	221 007	5 533 214	18 104 089	15 845 401	15 256 955	10 966 586	2 847 134	1	(W)	1
RECREATIONAL FACILITIES SUCH AS ATHLETIC FIELDS, GOLF COURSES, AND OUTDOOR TENNIS COURTS											
All establishments specializing in type .....	490	7 590	168 993	692 149	598 806	564 261	357 896	127 887	5	5	7
Establishments with —											
100 percent specialization .....	397	3 894	79 018	373 515	373 515	306 316	190 126	67 199	6	6	8
90 to 99 percent specialization .....	37	644	*18 852	69 248	64 427	52 408	31 339	16 840	37	38	38
80 to 89 percent specialization .....	28	265	5 729	25 224	20 795	18 460	13 257	6 764	20	26	38
70 to 79 percent specialization .....	10	592	13 185	48 713	35 384	38 602	33 203	10 111	5	6	5
60 to 69 percent specialization .....	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization .....	*3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
DAM AND RESERVOIR CONSTRUCTION											
All establishments specializing in type .....	142	3 079	111 766	442 584	408 913	392 922	245 721	49 661	2	2	1
Establishments with —											
100 percent specialization .....	56	2 224	89 305	339 967	339 967	303 148	187 445	36 819	2	3	(W)
90 to 99 percent specialization .....	*5	66	1 750	9 315	8 445	(D)	2 434	(D)	33	21	(D)
80 to 89 percent specialization .....	41	249	5 101	20 274	16 722	17 479	11 952	2 795	6	8	1
70 to 79 percent specialization .....	4	36	1 244	5 005	3 603	(D)	2 930	(D)	(W)	(W)	(D)
60 to 69 percent specialization .....	28	231	8 201	47 210	28 730	41 335	25 653	5 874	9	8	9
51 to 59 percent specialization .....	6	271	6 164	20 812	11 442	19 081	15 306	1 731	(W)	(W)	(W)
MARINE CONSTRUCTION											
All establishments specializing in type .....	588	11 345	325 461	1 308 833	1 197 619	1 154 849	795 074	153 983	2	1	1
Establishments with —											
100 percent specialization .....	502	8 418	242 390	952 002	952 002	847 490	571 323	104 512	3	2	2
90 to 99 percent specialization .....	34	514	11 874	41 818	38 287	37 723	22 877	4 095	28	18	5
80 to 89 percent specialization .....	18	716	18 296	65 095	52 623	53 690	44 003	11 405	3	5	6
70 to 79 percent specialization .....	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
60 to 69 percent specialization .....	13	529	16 530	71 944	44 278	66 048	44 487	5 896	(W)	(W)	(W)
51 to 59 percent specialization .....	*13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
HARBOR AND PORT FACILITIES											
All establishments specializing in type .....	263	3 553	93 449	379 411	326 358	311 624	199 188	67 787	5	4	11
Establishments with —											
100 percent specialization .....	167	1 911	47 025	193 791	193 791	165 409	103 269	28 382	7	7	7
90 to 99 percent specialization .....	*14	276	8 226	32 199	29 220	29 882	22 812	2 316	14	8	29
80 to 89 percent specialization .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
70 to 79 percent specialization .....	50	455	17 322	84 807	62 271	61 558	32 577	23 248	7	10	32
60 to 69 percent specialization .....	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization .....	21	450	9 349	30 023	16 333	25 142	19 536	4 880	24	19	28
CONSERVATION AND DEVELOPMENT CONSTRUCTION											
All establishments specializing in type .....	1 666	10 652	204 645	955 495	833 547	835 182	591 863	120 312	4	3	5
Establishments with —											
100 percent specialization .....	1 190	6 105	111 957	515 742	515 742	461 806	327 866	53 936	5	4	5
90 to 99 percent specialization .....	121	852	17 733	78 014	73 145	69 867	46 490	8 146	15	11	13
80 to 89 percent specialization .....	62	1 341	24 676	108 899	89 374	89 608	63 629	19 290	8	15	29
70 to 79 percent specialization .....	115	870	14 260	58 931	43 097	55 545	39 628	3 386	16	16	15
60 to 69 percent specialization .....	104	661	14 570	78 530	48 945	69 841	49 433	8 688	10	7	11
51 to 59 percent specialization .....	72	820	21 446	115 377	63 242	88 513	64 815	26 863	7	5	3
EARTHMOVING, NONBUILDING											
All establishments specializing in type .....	2 593	22 738	504 103	2 025 522	1 823 961	1 777 830	1 347 613	247 691	3	3	7
Establishments with —											
100 percent specialization .....	1 947	14 066	300 353	1 181 530	1 181 530	1 050 924	786 525	130 605	5	5	12
90 to 99 percent specialization .....	110	1 971	49 680	195 715	180 214	169 474	129 937	26 241	13	8	8
80 to 89 percent specialization .....	156	2 064	58 069	235 146	193 685	205 968	165 942	29 177	6	4	3
70 to 79 percent specialization .....	166	1 895	36 391	168 450	122 141	143 972	105 974	24 477	7	6	6
60 to 69 percent specialization .....	144	1 834	42 069	160 814	100 701	135 828	104 587	24 986	6	8	27
51 to 59 percent specialization .....	68	905	17 540	83 864	45 688	71 661	54 646	12 203	11	10	16
RAILROADS											
All establishments specializing in type .....	421	6 755	128 792	461 963	431 738	414 935	285 968	47 028	4	3	2
Establishments with —											
100 percent specialization .....	360	5 669	100 675	332 001	332 001	305 118	216 130	26 883	5	4	4
90 to 99 percent specialization .....	15	309	6 283	33 153	30 018	(D)	16 613	(D)	23	14	(D)
80 to 89 percent specialization .....	14	235	7 263	23 074	18 997	22 948	16 991	126 14	14	18	28
70 to 79 percent specialization .....	6	144	4 965	45 668	33 800	(D)	21 401	(D)	16	3	(D)
60 to 69 percent specialization .....	*19	290	5 148	18 811	12 013	(D)	9 917	(D)	18	12	(D)
51 to 59 percent specialization .....	4	105	2 456	9 254	4 907	(D)	4 913	(D)	(W)	(W)	(D)



**Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
BLAST FURNACES, PETROLEUM REFINERIES, AND CHEMICAL COMPLEXES											
All establishments specializing in type .....	384	51 528	1 311 325	3 042 775	2 881 326	2 585 483	1 967 219	457 292	(W)	1	1
Establishments with —											
100 percent specialization .....	295	37 727	946 400	2 110 053	2 110 053	1 753 808	1 389 157	356 245	(W)	1	1
90 to 99 percent specialization .....	27	5 050	147 018	337 114	327 611	302 626	232 824	34 487	1	1	2
80 to 89 percent specialization .....	22	3 751	74 930	214 759	177 426	190 499	136 856	24 260	1	1	(W)
70 to 79 percent specialization .....	17	2 910	83 610	206 176	150 473	176 866	129 241	29 310	1	1	1
60 to 69 percent specialization .....	14	1 869	54 217	164 694	110 423	152 918	71 078	11 776	1	1	(W)
51 to 59 percent specialization .....	7	219	5 149	9 978	5 338	8 764	8 060	1 213	6	10	1
POWER PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type .....	227	20 602	650 999	1 919 797	1 707 906	1 560 730	1 375 598	359 067	1	1	1
Establishments with —											
100 percent specialization .....	165	11 091	341 107	836 220	836 220	739 814	670 441	96 406	1	1	1
90 to 99 percent specialization .....	9	(D)	(D)	312 878	294 607	297 588	(D)	15 289	(D)	1	3
80 to 89 percent specialization .....	23	2 196	68 889	504 976	416 129	305 164	277 982	199 812	3	1	1
70 to 79 percent specialization .....	5	(D)	(D)	26 418	19 204	(D)	(D)	(D)	(D)	(W)	(D)
60 to 69 percent specialization .....	*14	2 431	97 946	197 050	119 172	161 834	122 500	35 216	1	(W)	(W)
51 to 59 percent specialization .....	9	441	11 727	42 253	22 571	(D)	21 615	(D)	8	7	(D)
SEWAGE TREATMENT PLANTS											
All establishments specializing in type .....	317	12 607	309 203	1 712 883	1 387 638	1 232 940	684 712	479 942	1	1	2
Establishments with —											
100 percent specialization .....	113	3 400	87 926	525 808	525 808	394 618	231 353	131 190	2	3	6
90 to 99 percent specialization .....	36	1 660	38 398	219 891	203 229	177 343	96 949	42 548	4	5	5
80 to 89 percent specialization .....	52	2 312	43 392	207 706	168 631	135 791	68 602	71 914	3	3	2
70 to 79 percent specialization .....	35	1 988	51 988	305 332	225 063	196 697	93 455	108 634	2	2	(W)
60 to 69 percent specialization .....	47	1 717	43 288	214 630	134 394	173 367	97 066	41 262	6	5	2
51 to 59 percent specialization .....	31	1 527	44 209	239 514	130 511	155 123	97 284	84 391	3	2	2
WATER TREATMENT PLANTS											
All establishments specializing in type .....	207	3 151	80 236	414 163	351 373	312 662	176 018	101 500	4	3	4
Establishments with —											
100 percent specialization .....	55	1 524	39 809	212 818	212 818	160 294	92 889	52 524	4	4	4
90 to 99 percent specialization .....	10	204	5 039	23 725	22 133	16 761	8 884	6 963	15	16	24
80 to 89 percent specialization .....	*11	*74	2 295	*13 632	*11 315	*10 836	*3 782	*2 796	47	55	70
70 to 79 percent specialization .....	88	198	4 034	23 883	17 692	19 199	11 506	4 683	20	17	14
60 to 69 percent specialization .....	34	950	24 985	122 088	77 417	91 232	51 940	30 855	6	3	2
51 to 59 percent specialization .....	7	198	4 071	18 015	9 996	14 338	7 015	3 677	16	17	29
OILFIELDS											
All establishments specializing in type .....	411	4 519	89 516	273 232	265 335	260 039	197 627	13 192	4	3	3
Establishments with —											
100 percent specialization .....	357	4 022	78 386	233 427	233 427	224 229	166 461	9 197	4	3	4
90 to 99 percent specialization .....	*21	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
80 to 89 percent specialization .....	*32	304	6 068	18 045	15 357	16 540	16 116	1 505	15	15	8
70 to 79 percent specialization .....	—	—	—	—	—	—	—	—	—	—	—
60 to 69 percent specialization .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
51 to 59 percent specialization .....	—	—	—	—	—	—	—	—	—	—	—

**Table 9. Quarterly Construction Worker Hours and Employment for Establishments With**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
	A	B	C	D	E	F	G
<b>United States</b> .....	<b>14 532</b>	<b>238 204</b>	<b>420 660</b>	<b>222 536</b>	<b>94 125</b>	<b>242 847</b>	<b>107 526</b>
Alabama .....	280	6 867	12 928	7 580	3 981	7 203	3 335
Alaska .....	86	934	1 432	899	337	997	381
Arizona .....	187	2 694	4 664	2 508	1 082	2 701	1 218
Arkansas .....	196	1 459	2 474	1 216	439	1 527	686
California .....	1 146	24 604	42 878	22 882	9 444	24 743	10 749
Colorado .....	270	3 917	6 796	3 464	1 453	3 842	1 610
Connecticut .....	221	4 588	7 651	3 963	1 443	5 650	2 171
Delaware .....	26	874	1 810	751	357	799	423
District of Columbia .....	5	(D)	(D)	(D)	(D)	(D)	(D)
Florida .....	923	10 011	17 857	9 184	3 879	9 769	4 442
Georgia .....	477	5 003	8 679	4 926	2 026	5 115	2 285
Hawaii .....	46	766	1 307	712	296	795	334
Idaho .....	70	505	929	369	145	412	186
Illinois .....	413	4 821	8 472	3 823	1 536	4 882	2 201
Indiana .....	316	3 184	5 452	2 618	1 086	3 149	1 352
Iowa .....	292	1 148	2 051	919	351	1 217	531
Kansas .....	195	1 708	3 367	1 497	701	1 786	844
Kentucky .....	217	1 822	2 949	1 400	545	1 999	819
Louisiana .....	333	15 217	27 949	16 342	7 056	15 976	7 234
Maine .....	133	3 699	8 119	2 883	1 563	3 932	2 213
Maryland .....	174	4 586	7 273	4 211	1 448	5 025	2 010
Massachusetts .....	300	4 566	8 469	3 791	1 727	4 822	2 226
Michigan .....	392	4 503	7 840	2 973	1 150	4 166	1 820
Minnesota .....	281	2 114	4 088	1 418	576	2 305	1 142
Mississippi .....	178	1 544	2 705	1 392	487	1 565	665
Missouri .....	309	2 108	3 114	1 777	624	2 279	836
Montana .....	171	816	1 338	753	275	923	369
Nebraska .....	152	719	1 120	539	181	720	283
Nevada .....	51	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire .....	128	1 105	2 001	888	392	1 144	497
New Jersey .....	385	8 994	16 532	8 974	4 103	9 755	4 606
New Mexico .....	102	1 172	2 081	903	384	1 327	588
New York .....	559	6 664	11 551	5 426	2 251	6 713	2 943
North Carolina .....	521	3 325	6 374	3 172	1 423	3 288	1 616
North Dakota .....	83	531	703	375	106	804	221
Ohio .....	408	6 420	10 366	5 401	1 951	6 803	2 772
Oklahoma .....	330	3 102	5 125	2 838	1 101	3 212	1 324
Oregon .....	182	721	1 039	587	186	689	253
Pennsylvania .....	454	13 548	24 318	13 458	5 721	13 724	6 038
Rhode Island .....	38	310	464	250	90	352	131
South Carolina .....	260	17 928	30 582	18 188	7 509	17 948	7 744
South Dakota .....	38	125	213	66	26	156	66
Tennessee .....	269	2 751	5 124	2 554	1 114	2 880	1 354
Texas .....	1 457	38 209	69 658	37 928	16 480	36 983	16 718
Utah .....	96	997	1 586	802	317	957	353
Vermont .....	67	394	676	300	120	410	182
Virginia .....	409	4 872	7 902	4 448	1 759	4 873	1 985
Washington .....	402	4 006	7 323	3 642	1 541	4 060	1 877
West Virginia .....	136	2 038	3 205	1 945	721	2 027	849
Wisconsin .....	233	1 296	2 027	841	331	1 412	573
Wyoming .....	112	747	1 295	747	361	773	352

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.



# Payroll by State: 1987

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
244 807	110 174	242 652	108 833	(W)	1	(W)	1	1	1	1	1	(W)	1	U.S.
6 700	2 825	5 985	2 786	2	3	2	2	3	3	3	3	3	4	AL
981	371	858	341	12	8	12	8	12	8	12	8	13	9	AK
3 150	1 350	2 419	1 012	2	5	3	6	3	5	3	5	2	5	AZ
1 652	724	1 440	624	10	7	12	8	9	9	11	7	8	6	AR
26 103	11 326	24 687	11 358	1	1	1	1	1	1	1	1	1	1	CA
4 344	1 848	4 017	1 884	2	3	2	3	3	3	3	4	3	4	CO
3 888	1 773	4 852	2 262	2	3	2	4	2	3	3	3	2	3	CT
822	398	1 122	631	2	4	2	4	2	5	2	5	2	3	DE
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	DC
10 009	4 583	11 100	4 951	3	4	4	5	3	4	3	4	2	3	FL
5 093	2 245	4 879	2 123	3	4	3	3	3	4	3	4	4	4	GA
784	326	773	349	3	3	2	2	5	2	3	3	5	7	HI
626	318	613	278	10	11	11	11	15	17	9	9	10	11	ID
5 428	2 494	5 153	2 239	3	3	3	3	3	4	3	3	2	3	IL
3 360	1 540	3 611	1 472	4	4	4	5	4	4	4	5	5	5	IN
1 208	567	1 250	600	10	13	10	13	11	13	10	13	11	14	IA
1 907	934	1 644	886	6	7	6	7	8	7	6	6	6	7	KS
2 090	863	1 798	721	14	15	10	13	16	17	16	16	13	14	KY
14 357	6 609	14 193	7 048	1	1	1	1	1	2	1	1	1	1	LA
4 675	2 509	3 305	1 834	3	4	3	4	3	4	2	4	3	5	ME
4 622	1 982	4 486	1 831	2	4	2	4	2	3	2	4	2	4	MD
4 892	2 273	4 758	2 242	2	3	2	3	2	3	3	3	2	3	MA
5 545	2 505	5 329	2 365	3	5	4	5	4	5	3	5	3	5	MI
2 545	1 341	2 190	1 028	4	6	4	6	5	7	5	7	5	7	MN
1 644	743	1 575	808	9	13	8	14	9	14	9	14	10	10	MS
2 303	868	2 071	784	5	6	5	6	6	7	5	7	5	6	MO
835	360	755	332	5	8	7	6	5	6	7	11	7	14	MT
909	347	708	308	10	9	9	12	10	10	13	10	11	9	NE
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	NV
1 258	565	1 131	546	7	9	6	10	8	10	7	9	6	9	NH
8 865	4 026	8 391	3 796	1	1	1	1	1	1	2	2	1	2	NJ
1 385	639	1 074	468	5	6	6	8	5	6	6	7	5	5	NM
7 226	3 272	7 294	3 083	3	3	3	3	3	3	3	4	3	4	NY
3 337	1 663	3 503	1 671	6	9	7	10	6	9	8	10	6	8	NC
468	206	476	168	14	8	18	6	16	8	17	11	12	8	ND
7 096	3 176	6 380	2 465	2	3	2	3	2	3	2	3	2	3	OH
3 058	1 246	3 299	1 453	5	7	6	8	6	7	6	7	6	8	OK
839	320	774	278	9	14	9	12	9	15	9	16	10	14	OR
12 749	6 156	14 263	6 401	1	2	1	1	1	2	1	2	1	2	PA
341	128	299	113	11	9	10	7	10	8	11	10	13	12	RI
17 360	7 563	18 218	7 764	1	1	1	1	1	1	1	1	1	1	SC
132	54	146	66	26	33	18	22	30	37	29	34	27	36	SD
2 767	1 356	2 804	1 299	4	5	6	7	5	5	4	5	5	6	TN
37 825	17 592	40 102	18 867	1	1	1	1	1	1	1	1	1	1	TX
1 016	419	1 211	495	7	8	6	6	8	11	10	10	6	6	UT
460	207	407	166	11	23	7	15	13	27	12	25	9	23	VT
5 280	2 126	4 887	2 031	8	6	8	10	8	6	8	6	7	6	VA
4 316	1 991	4 004	1 913	6	7	6	6	6	7	5	7	7	8	WA
2 113	788	2 069	846	5	4	5	4	6	4	7	4	5	4	WV
1 449	605	1 483	517	9	11	9	12	9	12	8	11	10	12	WI
686	285	784	295	7	13	7	21	7	16	8	9	8	10	WY

**Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1987					1982 construction receipts for work done in this State <sup>1</sup>	Percent change 1987 (col A) to 1982 (col F)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State <sup>1</sup>	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Value of construction work	Number	Value of construction work					
A	B	C	D	E	F	G	A	C	E	
United States -----	25 632 969	14 209	17 825 777	3 934	7 807 192	33 657 455	-23.8	(W)	1	(W)
Alabama -----	410 227	277	265 621	119	144 605	302 982	35.4	3	5	1
Alaska -----	(D)	71	103 607	12	(D)	680 530	(D)	(D)	8	(D)
Arizona -----	401 997	177	216 427	70	185 570	856 164	-53.0	3	5	1
Arkansas -----	218 253	188	84 692	96	133 560	182 117	19.8	5	12	1
California -----	3 289 376	1 135	2 596 826	108	692 549	3 136 598	4.9	1	1	(W)
Colorado -----	354 894	249	213 759	53	141 134	506 515	-29.9	2	4	1
Connecticut -----	322 644	221	218 645	53	103 998	91 531	252.5	3	4	4
Delaware -----	52 698	25	22 431	59	30 266	141 011	-62.6	5	9	5
District of Columbia -----	(D)	5	(D)	20	(D)	(D)	(D)	(D)	(D)	(D)
Florida -----	1 147 352	912	905 952	105	241 400	978 279	17.3	2	3	3
Georgia -----	892 864	472	419 357	156	473 507	610 341	46.3	1	3	1
Hawaii -----	(D)	46	(D)	9	(D)	(D)	(D)	(D)	(D)	(D)
Idaho -----	95 961	69	32 523	47	63 437	78 680	22.0	4	11	3
Illinois -----	875 416	400	617 919	94	257 497	999 112	-12.4	2	3	2
Indiana -----	364 855	311	283 112	93	81 743	527 492	-30.8	3	4	1
Iowa -----	159 247	290	105 157	81	54 090	118 217	34.7	6	8	9
Kansas -----	143 294	193	92 482	63	50 812	272 887	-47.5	6	9	2
Kentucky -----	334 952	216	153 732	111	181 220	266 619	25.6	5	11	3
Louisiana -----	1 092 045	322	807 039	96	285 006	1 734 813	-37.1	1	1	2
Maine -----	(D)	132	186 343	53	(D)	96 902	(D)	(D)	5	(D)
Maryland -----	378 021	171	283 808	68	94 213	537 815	-29.7	3	4	1
Massachusetts -----	828 783	299	683 476	137	145 306	364 521	127.4	1	2	1
Michigan -----	517 548	371	373 253	78	144 294	1 105 539	-53.2	3	4	1
Minnesota -----	152 627	270	121 472	49	31 154	163 698	-6.8	7	8	5
Mississippi -----	160 783	178	91 053	85	69 729	1 042 637	-84.6	4	6	2
Missouri -----	230 103	302	153 176	80	76 926	290 511	-20.8	4	6	2
Montana -----	148 268	170	139 634	13	8 633	486 796	-69.5	3	3	(W)
Nebraska -----	57 272	148	35 933	34	21 338	50 945	12.4	8	13	2
Nevada -----	604 717	48	(D)	38	(D)	679 557	-11.0	1	(D)	(D)
New Hampshire -----	220 094	128	86 093	61	134 000	360 255	-38.9	3	7	(W)
New Jersey -----	1 502 327	378	516 727	104	985 599	942 221	59.4	1	2	1
New Mexico -----	120 396	100	55 130	52	65 266	251 007	-52.0	4	9	3
New York -----	1 189 857	543	1 014 312	160	175 544	1 072 854	10.9	2	2	2
North Carolina -----	556 435	517	245 715	137	310 720	266 638	108.7	3	7	1
North Dakota -----	76 223	78	48 067	21	28 155	58 467	30.4	8	13	6
Ohio -----	768 941	406	625 866	71	143 075	647 243	18.8	2	2	1
Oklahoma -----	166 494	326	143 252	52	23 241	265 129	-37.2	7	8	5
Oregon -----	183 765	176	92 553	60	91 212	81 505	125.5	4	7	2
Pennsylvania -----	1 145 072	446	923 528	120	221 544	1 224 769	-6.5	1	2	1
Rhode Island -----	44 277	38	37 534	36	6 742	(D)	(D)	8	9	3
South Carolina -----	530 398	255	379 554	157	150 844	(D)	(D)	2	2	4
South Dakota -----	20 796	38	6 338	22	14 457	24 786	-16.1	20	39	24
Tennessee -----	330 196	259	222 931	107	107 265	713 976	-53.8	3	4	2
Texas -----	2 904 366	1 409	2 240 105	124	664 260	4 635 753	-37.3	1	1	(W)
Utah -----	(D)	87	(D)	41	145 485	246 010	(D)	(D)	(D)	2
Vermont -----	60 030	67	25 071	41	34 958	73 116	-17.9	7	12	9
Virginia -----	589 443	408	365 863	217	223 579	459 688	28.2	7	11	2
Washington -----	595 312	396	483 341	46	111 971	1 931 153	-69.2	6	7	3
West Virginia -----	188 125	128	126 373	99	61 751	178 133	5.6	3	4	4
Wisconsin -----	185 419	233	146 604	26	38 814	153 332	20.9	4	6	(W)
Wyoming -----	(D)	103	(D)	77	88 200	477 224	(D)	(D)	(D)	3

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.



Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind of Business Activity: 1987 and 1982

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	Dollar value of business done <sup>1</sup>		Relative standard error of estimate (percent)	
	1987	1982	1987	1982
All kinds of business.....	27 310 131	36 310 245	(W)	(W)
General building contractor .....	1 169 246	2 556 257	1	1
Highway and street contractor.....	654 542	552 723	1	1
Paving contractor .....	245 554	45 757	4	1
Heavy construction.....	22 586 096	26 824 468	(W)	(W)
Heavy construction contractor .....	17 379 291	(NA)	(W)	(NA)
Cable laying contractor .....	45 958	(NA)	7	(NA)
Dredging contractor .....	506 611	(NA)	1	(NA)
Trenching contractor .....	412 983	(NA)	4	(NA)
Excavating and earthmoving contractor .....	3 843 069	(NA)	2	(NA)
Pile driving contractor .....	284 089	(NA)	4	(NA)
Blasting contractor .....	114 092	(NA)	9	(NA)
Concrete construction .....	46 573	114 173	4	1
Excavation contractor, for buildings .....	75 878	163 309	6	1
Other construction activities .....	479 287	(S)	6	(S)
Construction management .....	814 220	1 898 590	(W)	(W)
Engineering services .....	381 471	(S)	(W)	(S)
Mining .....	109 660	(S)	1	(S)
Rental of construction machinery or equipment to others.....	85 164	56 137	4	1
Retail trade .....	23 975	105 545	7	2
Other activities .....	259 594	3 993 286	3	3
Kind of business activity, n.s.k. ....	378 871	(S)	4	(S)

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.

**Table 12. Selected Industry Ratios for Establishments With Payroll: 1987 and 1982**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1987	1982	Relative standard error of estimate (percent) for 1987
<b>AVERAGE PER ESTABLISHMENT</b>			
Number of employees**.....	20.5	54.2	1
Number of construction workers.....	16.4	43.0	1
Number of all other employees.....	4.1	(NA)	1
Payroll, all employees..... \$1,000..	527.2	1 443.8	1
Payroll, construction workers..... do..	394.1	1 128.9	1
Payroll, other employees..... do..	133.2	315.0	1
Dollar value of business done..... do..	1 879.3	4 739.0	1
Value of construction work <sup>1</sup> ..... do..	1 763.9	4 392.8	1
Cost of materials, components, supplies, and fuels..... do..	522.0	1 317.1	1
Construction work subcontracted to others..... do..	304.4	948.3	1
Rental cost for machinery, equipment, and buildings..... do..	57.3	74.4	2
Capital expenditures, other than land..... do..	46.3	58.6	2
Gross book value of depreciable assets..... do..	401.4	711.7	2
<b>AVERAGE PER EMPLOYEE</b>			
Payroll, all employees..... do..	25.7	26.6	(W)
Dollar value of business done..... do..	91.8	87.5	(W)
Value added††..... do..	51.4	45.6	(W)
<b>AVERAGE PER CONSTRUCTION WORKER</b>			
Payroll, construction workers..... do..	24.0	26.3	(W)
Value of construction work <sup>1</sup> ..... do..	107.6	102.2	(W)
Construction worker hours.....	1 766.0	1 833.1	(W)
<b>AVERAGE PER OTHER EMPLOYEE</b>			
Payroll, other employees..... \$1,000..	32.6	(NA)	(W)
<b>AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK<sup>1</sup></b>			
Payroll, all employees.....	.299	.329	(W)
Cost of materials, components, supplies, and fuels.....	.296	.300	(W)
Cost of construction work subcontracted to others.....	.173	.216	(W)
Rental cost for machinery, equipment, and buildings.....	.033	.017	

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity done during the year.



**Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
					Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost for machinery, equipment, and buildings
<b>United States</b> .....	<b>20.5</b>	<b>25.7</b>	<b>1 766.0</b>	<b>107.6</b>	<b>.299</b>	<b>.296</b>	<b>.173</b>	<b>.033</b>
Alabama .....	30.1	23.0	1 882.6	105.9	.266	(D)	.351	.012
Alaska .....	13.3	37.4	1 533.2	117.2	.391	.322	.116	.036
Arizona .....	18.1	22.4	1 731.3	89.1	.315	.294	.182	.032
Arkansas .....	8.9	18.3	1 695.7	87.2	.251	.392	.090	.032
California .....	29.9	30.5	1 742.7	151.5	.280	.310	.136	.040
Colorado .....	18.4	23.6	1 735.0	118.4	.253	.291	.173	.042
Connecticut .....	23.9	28.6	1 667.6	95.4	.345	.137	.083	.018
Delaware .....	38.3	36.2	2 070.9	87.9	.469	.288	.046	.027
District of Columbia .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida .....	13.2	20.3	1 783.7	104.4	.237	.349	.166	.045
Georgia .....	12.7	20.0	1 734.8	105.4	.231	.333	.172	.030
Hawaii .....	21.9	31.6	1 706.3	156.2	.266	(D)	.249	.034
Idaho .....	10.2	25.1	1 839.6	200.3	.177	.285	(D)	.024
Illinois .....	14.4	25.6	1 757.3	171.4	.185	.274	.167	.035
Indiana .....	12.3	25.4	1 712.3	131.5	.235	.306	.199	.033
Iowa .....	5.2	17.5	1 786.6	100.9	.228	.311	.190	.025
Kansas .....	10.5	20.8	1 971.3	91.9	.272	.321	.119	.043
Kentucky .....	10.1	17.2	1 618.6	89.2	.233	.321	.142	.042
Louisiana .....	51.1	21.7	1 836.7	66.3	.366	.254	.107	.033
Maine .....	31.8	29.8	2 194.9	95.9	.356	.203	.120	.052
Maryland .....	43.8	28.1	1 585.9	134.5	.348	.161	.165	.038
Massachusetts .....	22.0	31.2	1 854.8	158.4	.284	.281	.223	.035
Michigan .....	14.2	25.5	1 741.1	119.7	.262	.261	.142	.026
Minnesota .....	8.7	26.2	1 933.8	118.0	.257	.384	.176	.031
Mississippi .....	9.8	17.5	1 751.9	62.8	.316	.350	.113	.033
Missouri .....	8.6	21.0	1 477.2	113.7	.232	.252	.218	.029
Montana .....	5.9	26.1	1 639.7	175.6	.183	.288	.138	.027
Nebraska .....	6.2	19.2	1 557.7	124.5	.200	.310	.128	.047
Nevada .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
New Hampshire .....	10.7	21.9	1 810.9	111.8	.242	.318	.119	.050
New Jersey .....	28.3	33.5	1 838.1	105.9	.383	(D)	.101	.020
New Mexico .....	13.0	20.6	1 775.6	77.8	.301	.367	.124	.072
New York .....	15.1	28.9	1 733.3	171.4	.214	.256	.227	.031
North Carolina .....	7.9	17.2	1 917.0	87.3	.245	.286	.143	.040
North Dakota .....	7.6	22.3	1 323.9	101.5	.262	(D)	.288	.016
Ohio .....	20.4	27.4	1 614.6	155.2	.229	.271	.293	.020
Oklahoma .....	11.5	16.3	1 652.2	65.7	.304	.423	.154	.042
Oregon .....	5.3	23.3	1 441.1	189.8	.166	.300	.229	.042
Pennsylvania .....	37.7	30.1	1 795.0	95.1	.401	.238	.169	.021
Rhode Island .....	9.9	25.2	1 496.8	127.2	.241	.249	.164	.029
South Carolina .....	81.3	26.0	1 705.8	89.0	.344	(D)	.213	.020
South Dakota .....	3.6	13.1	1 704.0	66.3	.217	.307	(D)	.043
Tennessee .....	12.1	20.6	1 862.6	116.7	.208	.323	.203	.032
Texas .....	31.4	24.2	1 823.1	72.1	.402	.338	.161	.040
Utah .....	12.8	22.8	1 590.8	124.7	.225	(D)	.118	.039
Vermont .....	7.2	17.3	1 715.7	79.1	.268	.266	.109	.034
Virginia .....	14.6	19.9	1 621.9	83.1	.293	.286	.177	.042
Washington .....	12.4	31.7	1 828.0	168.0	.235	.318	.149	.031
West Virginia .....	17.3	23.6	1 572.6	72.1	.378	.205	.083	.032
Wisconsin .....	6.9	22.0	1 564.0	133.7	.204	.257	.225	.023
Wyoming .....	8.2	22.5	1 733.6	103.8	.266	.348	.141	.045





# APPENDIX A.

## Explanation of Terms

**Construction**—Is composed of three broad categories:

1. **New construction**—Includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators, and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations or reconstruction**—Includes construction activity making structural changes to existing facilities. Generally, this type of activity is considered a capital investment in the property.
3. **Maintenance and repair**—Includes construction done for the purpose of upkeep of property rather than additional investment in the property.

Examples of the general distinction between maintenance and repair and reconstruction are provided here: roof repairs, including the replacement of shingles, gutters, etc., are classified under maintenance and repairs. A complete reroofing, however, is classified as reconstruction.

**Number of establishments in business during year**—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

**Proprietors and working partners**—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

**All employees**—Comprise all full-time and part-time employees on the payrolls of construction establishments, who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

**Construction workers**—Includes all workers up through the working foreman level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment

operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

**Other employees**—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

**Construction worker hours**—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1987.

**Payroll**—Includes the gross earnings paid in the calendar year 1987 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

**Employer costs for fringe benefits (supplemental labor costs)**—Represents expenditures made by the employer during 1987 for legally required and voluntary fringe benefit programs for employees.

**Legally required contributions**—Include Social Security contributions, unemployment compensation, workman's compensation, and State temporary disability payments.

**Voluntary payments**—Include life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

**Value of construction work done**—Includes all value of construction work done during 1987 for construction work performed by general contractors, special trades contractors, subcontractors, and land development and improvement work. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.



Builders were instructed to include the value of buildings and other structures built or being built for sale in 1987 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators, etc., were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

**Land receipts**—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in the value of construction work done.)

**Other business receipts**—Includes business receipts not reported as value of construction work done or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

**Net value of construction work**—Derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

**Value added**—Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted to others, and costs for materials, components, supplies and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, land receipts are also subtracted from dollar value of business done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

**Selected costs**—Represents the costs for materials, components, and supplies; costs for construction work subcontracted to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1987 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)
- freight and other direct charges should represent only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, are included in this item as are costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment, such as printing presses; computer systems; etc., which are not an integral part of a structure
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted to others include:

- all costs during 1987 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- The costs to the reporting establishment for its purchases of materials, components, and supplies, provided to a subcontractor for his use. Such costs are reported under a separate category, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal and coke products, etc.

**Rental costs for machinery, equipment, and buildings**—Includes all costs during 1987 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It



excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

**Selected purchased services**—Includes all costs during 1987 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies, or from other establishments of the same company. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property, or the cost of adapting it for another use. Such costs are included in "capital expenditures".

**Assets and depreciation**—Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and, (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987.

**Capital expenditures**—Refers to all costs actually incurred during 1987 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1987.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

**Inventories**—Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to report work in progress and finished units not sold for buildings and other structures built for sale.

Inventories of multi-establishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

**Ownership of construction projects**—This item shows the distribution of the value of construction work done by ownership of the project, that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal, and State and local governments.

**Value of construction work subcontracted in from others**—Includes the value of construction work during 1987 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

**Types of construction**—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1987. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose, i.e, office and residential, or commercial, they were to classify the building by major purpose.

In addition all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (include townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures containing two or more housing units (excluding attached single-family houses and townhouses described above).
- **Hotels and motels**—Includes hotels, motels, and tourist cabins intended for transient accommodations.



- **Other residential buildings**—Includes dormitories, fraternity and sorority houses, nurses homes, and other nonhousekeeping residential structures.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more.
- **Other commercial buildings, such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are not included in this category, but under nonbuilding construction.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes nonresidential buildings which are not classified elsewhere, such as fire stations, prisons, civic centers, bus and air passenger terminals and hangars.

#### Nonbuilding construction:

- **Highways, streets and related work, such as installation of guardrails, highway signs, etc.**—Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Recreational facilities**—Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Bridges and elevated highways**—Includes viaducts and overpasses; roads, highways, railroads, and causeways built on structural supports.
- **Tunnels**—Includes highway, pedestrian, and railroad tunnels.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, levees, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities**—Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants, and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers, and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.



- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.





## APPENDIX B.

### Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
<b>15</b>	<b>BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS</b>	<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.</b>
<b>152</b>	<b>General Building Contractors—Residential Buildings</b>	<b>173</b>	<b>Electrical Work Special Trade Contractors</b>
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	<b>174</b>	<b>Masonry, Stone Work Tile Setting, and Plastering Special Trade Contractors</b>
<b>153</b>	<b>Operative Builders</b>	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
<b>154</b>	<b>General Building Contractors—Nonresidential Buildings</b>	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	<b>175</b>	<b>Carpentry and Floor Work Special Trade Contractors</b>
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
<b>16</b>	<b>HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS</b>	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
<b>161</b>	<b>Highway and Street Construction, Except Elevated Highways</b>	<b>176</b>	<b>Roofing, Siding, and Sheet Metal Work Special Trade Contractors</b>
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
<b>162</b>	<b>Heavy Construction, Except Highway and Street Construction</b>	<b>177</b>	<b>Concrete Work Special Trade Contractors</b>
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Powerline Construction	<b>178</b>	<b>Water Well Drilling Special Trade Contractors</b>
1629	Heavy Construction, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS</b>	<b>179</b>	<b>Miscellaneous Special Trade Contractors</b>
<b>171</b>	<b>Plumbing, Heating, and Air-Conditioning Special Trade Contractors</b>	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
<b>172</b>	<b>Painting and Paper Hanging Special Trade Contractors</b>	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified
		<b>6552</b>	<b>LAND SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES</b>





# **APPENDIX C.**

## **Geographic Divisions and States**

### **NEW ENGLAND STATES**

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

### **MIDDLE ATLANTIC STATES**

New Jersey  
New York  
Pennsylvania

### **EAST NORTH CENTRAL STATES**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

### **WEST NORTH CENTRAL STATES**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### **SOUTH ATLANTIC STATES**

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

### **SOUTH ATLANTIC STATES—Con.**

North Carolina  
South Carolina  
Virginia  
West Virginia

### **EAST SOUTH CENTRAL STATES**

Alabama  
Kentucky  
Mississippi  
Tennessee

### **WEST SOUTH CENTRAL STATES**

Arkansas  
Louisiana  
Oklahoma  
Texas

### **MOUNTAIN STATES**

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

### **PACIFIC STATES**

Alaska  
California  
Hawaii  
Oregon  
Washington



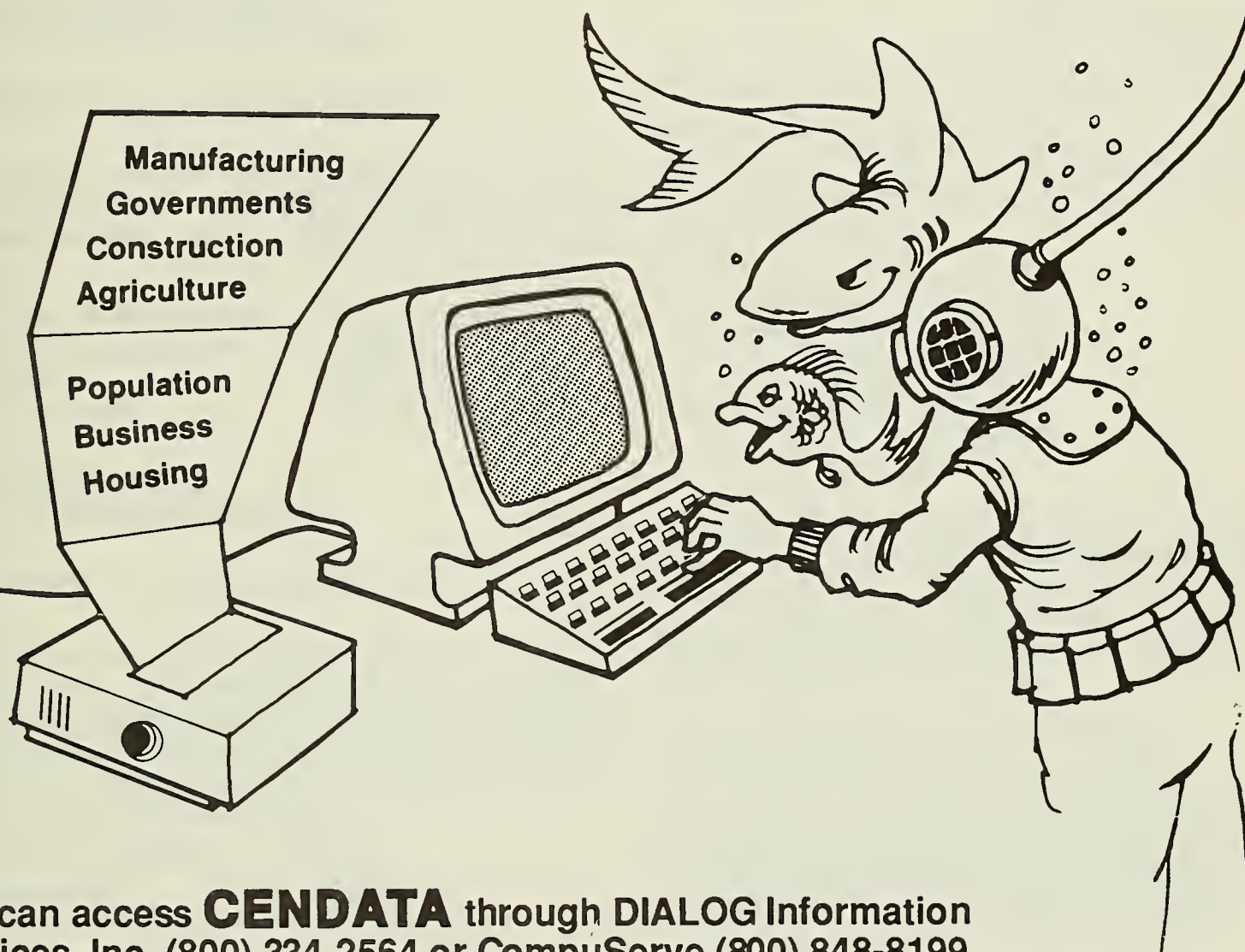


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# PUBLICATION PROGRAM

## 1987 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)
- Land developers and subdividers

Data products in the Census of Construction Industries are issued in 4 publication series and in 3 other media:

- Printed reports [P]
- CD-ROM [C]
- Computer tape [T]
- Highlights online [+]

## Preliminary Industry Series (CC87-I-1(P) through CC87-I-28(P))

(Available November 1988 through May 1989) [P]

Twenty-seven separate industry reports and a United States summary report, providing national statistics for establishments with payroll. Statistics shown for 1987 include:

- Number of establishments
- Number of employees
- Payroll
- Hours worked
- Value of construction work done, by type of structure
- Selected operating costs

## Final Industry Series (CC87-I-1 through CC87-I-28)

(Available June 1989 through November 1989) [P] [C] [T] [+]

Twenty-seven separate industry reports and a United States summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

## Geographic Area Series (CC87-A-1 through CC87-A-10)

(Available January 1990 through March 1990) [P] [C] [T] [+]

Nine reports on the construction industries, representing each census geographic division, and a United States summary report. Regional reports provide detailed data for States and metropolitan statistical areas.

## Subject Report—Legal Form of Organization and Type of Operation (CC87-S-1)

(Available May 1990) [P]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

## OTHER ECONOMIC CENSUSES REPORTS

The Census of Construction Industries is part of the 1987 Economic Censuses. These are conducted at five-year intervals in years ending in 2 and 7 and consist of seven separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the Census of Outlying Areas, including separate economic censuses of Puerto Rico and other outlying areas. The Census of Agriculture and Census of Governments are conducted separately.

## HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233. If you have any questions, call Census Customer Services 1-(301)-763-4100.



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7-1-9

Heavy Construction Contractors, Not Elsewhere Classified

1987 Census of C

For

Not to be

Industries

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